

**LISTING OF THE CLAIMS**

1.     **(Original)**   A method of generating a filter graph for a user-defined processing project, the method comprising:

analyzing the project for multiple accesses to a single source of media content;

determining that the multiple accesses cannot be combined and/or share a common processing chain; and

coupling a single instance of the media source to the one or more processing chains through a software object to satisfy the multiple accesses without invoking a commensurate number of multiple instances of the media source.

2.     **(Original)**   A method according to claim 1, further comprising:  
receiving a request for content at the software object; and  
issuing a seek command from the software object to the media source to retrieve the media for presentation to a requesting processing chain.

3.     **(Original)**   A method according to claim 1, wherein the method is implemented by a render engine, exposed from an operating system to a media processing system executing on a computing system.

4.     **(Original)**   A method according to claim 3, wherein the software object is a segment filter.

5.     **(Original)**   A method according to claim 1, further comprising:  
    identifying multiple simultaneous access to the media source; and  
    invoking a commensurate number of software objects, coupling a commensurate number of instances of the media source to processing chains to satisfy the multiple simultaneous requests.

6.     **(Original)**   A storage medium comprising a plurality of executable instructions including at least a subset of which that, when executed, implement a method according to claim 1.

7.     **(Original)**   A computing system comprising:  
    a storage medium having stored thereon a plurality of executable instructions; and  
    an execution unit, coupled to the storage medium, to execute at least a subset of the plurality of executable instructions to implement a method according to claim 1.

8.     **(Original)**   A method of generating a filter graph for a user-defined processing project, the method comprising:

analyzing the project for multiple accesses to a single source of media content;

determining that the multiple accesses cannot be combined and/or share a common processing chain; and

coupling a single instance of the media source to the one or more processing chains through a software object to satisfy the multiple accesses without invoking a commensurate number of multiple instances of the media source, wherein the one or more processing chains comprise:

    a scalable, dynamically reconfigurable matrix switch having a plurality of inputs and a plurality of outputs;

    at least one matrix switch input being communicatively linked with a first processing chain portion;

    at least one other matrix switch input being communicatively linked with a second processing chain portion;

    the matrix switch being configured to dynamically couple one or more of the matrix switch inputs to one or more of the matrix switch outputs.

9.     **(Original)** A method according to claim 8, further comprising:  
    receiving a request for content at the software object; and  
    issuing a seek command from the software object to the media source to retrieve the media for presentation to a requesting processing chain.

10. **(Original)** A method according to claim 8, wherein the method is implemented by a render engine, exposed from an operating system to a media processing system executing on a computing system.

11. **(Original)** A method according to claim 10, wherein the software object is a segment filter.

12. **(Original)** A method according to claim 8, further comprising: identifying multiple simultaneous access to the media source; and invoking a commensurate number of software objects, coupling a commensurate number of instances of the media source to processing chains to satisfy the multiple simultaneous requests.

13. **(Original)** A storage medium comprising a plurality of executable instructions including at least a subset of which that, when executed, implement a method according to claim 8.

14. **(Original)** A computing system comprising:  
a storage medium having stored thereon a plurality of executable instructions; and  
an execution unit, coupled to the storage medium, to execute at least a

subset of the plurality of executable instructions to implement a method according to claim 8.

15. **(Original)** A method of generating a filter graph for a user-defined processing project, the method comprising:

analyzing the project for multiple accesses to a single source of media content;

determining that the multiple accesses cannot be combined and/or share a common processing chain;

coupling a single instance of the media source to the multiple processing chains through a software object to satisfy the multiple accesses without invoking a commensurate number of multiple instances of the media source; and

ascertaining whether the multiple processing chains share common pre-processing attributes and, if so, interposing one or more associated filters between the single source of media content and the software object.

16. **(Original)** A method according to claim 15, further comprising:

receiving a request for content at the software object; and

issuing a seek command from the software object to the media source to retrieve the media for presentation to a requesting processing chain.

17. **(Original)** A method according to claim 15, wherein the method

is implemented by a render engine, exposed from an operating system to a media processing system executing on a computing system.

18. **(Original)** A method according to claim 17, wherein the software object is a segment filter.

19. **(Original)** A method according to claim 15, further comprising:  
identifying multiple simultaneous access to the media source; and  
invoking a commensurate number of software objects, coupling a commensurate number of instances of the media source to processing chains to satisfy the multiple simultaneous requests.

20. **(Original)** A storage medium comprising a plurality of executable instructions including at least a subset of which that, when executed, implement a method according to claim 15